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ONE HUNDRED BREEDING BIRDS OF AN ILLINOIS
TEN-MILE RADIUS.

BY ISAAC E. HESS.

FOR two years past I have been gathering data on the breeding birds of Illinois, and only one who has attempted such a task can realize what a paucity of authentic records is obtainable from the ornithological literature of the State. This apparent neglect of our ornithologists in a State so resourceful, is responsible for my submitting the records of my twelve years' study of the birds making their homes in a small portion of Champaign County in east central Illinois. The records in this paper are all from a radius of ten miles, with my home village of Philo as the center of operations.

A short description of the geography of the locality will perhaps add to the value of the records. The fortieth parallel pierces our township latitudinally and divides the circle almost in halves. I have found the fortieth parallel the natural boundary line of several northern and southern species. Situated on the eastern edge of the great Illinois plain, we have an altitude of 750 feet.

Five miles to the east, Salt Fork Creek winds its way toward the Wabash and the Salt Fork timber follows the stream all the way. To the west two miles is the Embarras River (pronounced Ambraw), here only a small stream with head waters in this county. Five miles south an east branch joins the Embarras, forming at the juncture our only swamp. This is also the beginning of Bowse's Grove which follows the stream many miles southward.

Four miles southeast is upland Lynn Grove — 160 acres of natural timber, mainly walnut, elm and basswood — with no forest nor stream connection with the other timber belts. The region between is one vast sweep of rolling fields with scarcely an acre not under cultivation.

Groves and orchards abound about us and osage-orange hedges are common along our highways. In our fields may always be found such bird-life as the Bob-white, Prairie Chicken, Upland Plover, Killdeer, Meadowlark, Prairie Horned Lark, Dickcissel, Grasshopper Sparrow, Indigo Bunting, Song, Field and Vesper

Sparrows. The hedge-rows furnish homes for the Loggerhead Shrike, Brown Thrasher, Yellow-billed Cuckoo, Mourning Dove, Mockingbird, Crow, Goldfinch, Yellow Warbler and Traill's Flycatcher. The orchards attract the Baltimore and Orchard Orioles, Kingbird, Bronzed Grackle, Chipping Sparrow, Robin and Warbling Vireo. The Screech Owl and Sparrow Hawk nest in the town maples, country orchards and timber alike.

In upland Lynn Grove I have found 55 species nesting, but there is always missing the Ovenbird, Kentucky Warbler, Louisiana Water-Thrush, Redstart and Gnatcatcher of the low damp woods of Bowse's Grove and Salt Fork.

No choice is exhibited by such birds as the Whippoorwill, Towhee, Hummingbird, Carolina Wren, Wood Thrush, Yellow-breasted Chat, Scarlet Tanager and Yellow-throat, as I find them distributed in the three timbers.

Such woods birds as the Wood Pewee, Scarlet Tanager, Summer Tanager, Crested Flycatcher, Screech Owl and Cardinal, I have found nesting in the village.

Within this radius, which is really but nine miles in extent, and incloses the University of Illinois, I have evidence of the nesting of over 100 species. Of these ninety-four species are represented in my cabinet by complete sets of eggs, mostly with nests. Sixty of these I have photographed "in situ."

In presenting the spring arrival dates which I have included in most species, my own observations only are used. These are not to be taken as "standard," for undoubtedly many of the birds are here, at times, for days before my limited time in the field allows the opportunity of recording them. Particularly is this true of the forest species.

My record of the nesting of Bachman's Sparrow I believe to be among the northern-most. The Hooded Warbler and Summer Tanager are rare in this latitude, and I know of no other record of the nesting of the Lark Sparrow in eastern Illinois.

List of Species.

1. **Ardea herodias.** GREAT BLUE HERON.—Rather rare breeder because of the absence of swampy territory. Three pairs found breeding in Lynn Grove, May 30, 1897. The three nests were in a lofty honey-locust,

92, 95 and 105 feet from the ground. Two sets of four and one of five eggs were taken. Found them again present at the same place in 1907. Arrives April 1 to 18.

2. *Butorides virescens*. GREEN HERON.—Common summer resident; found both in timber and orchards near running streams. One nest of five eggs was found in an orchard one mile from town and three miles from open water. Earliest set, 5 eggs, May 21, 1905; latest, 4 eggs, June 17, 1897. Arrives April 4 to 12.

3. *Nycticorax nycticorax naevius*. BLACK-CROWNED NIGHT HERON.—A not uncommon summer resident but irregular as to distribution. Arrives April 20 to 28. Found first colony of 38 pairs breeding in Bowse's Grove, June 2, 1901. All contained young but one nest from which I took a set of four eggs. On May 12, 1902, the colony seemed much larger and I took two more sets of four eggs each. During the last four seasons they were breeding in smaller colonies of two and three pairs and were scattered among the maple groves along Embarras Creek. May 6, 1909, I found them nesting in Salt Fork bottoms.

4. *Rallus elegans*. KING RAIL.—Rare summer resident. Have always considered this rail as a migrant here because of a lack of suitable territory. This season, 1909, however, I found five pairs nesting and attribute its apparent absence during past seasons to my ignorance of its habits. My first nest of 11 eggs was located June 10, 1909, in a small swampy spot along the Wabash R. R. tracks one mile from town. On June 13, 1909, I found one nest of 10, one of 11, and two of 12 eggs in small ponds along the Embarras.

5. *Bartramia longicauda*. UPLAND PLOVER.—Common summer resident of our upland pastures, arriving March 28 to April 8. Earliest nesting date, four eggs, May 4, 1900. Latest four eggs, May 20, 1906. They often fly over the village on moonlight nights of early spring uttering their sharp alarm notes. We hear their long pleasing whistles at all hours of the day during April. On May 16, 1906, I found a nest of four eggs in a clover patch within the village corporation.

6. *Actitis macularia*. SPOTTED SANDPIPER.—Common summer resident along our smaller streams and open ditches. Arrives May 9 to 18. One nest of four eggs was taken May 30, 1905. This shore bird sometimes nests quite a distance from water.

7. *Oxyechus vociferus*. KILLDEER.—Common summer resident. Arrives March 7 to March 17. The male of one pair which returns to a tile factory pond in the village each season, spends the first three days after arrival flying over town repeating its clamorous notes. Like the Upland Plover, the Killdeer often flies on moonlight nights. They begin nesting shortly after arrival and I found eggs at the point of hatching April 16, 1898. During 1900, I found nests with fresh eggs on the dates April 30, May 23, June 1, June 8, and June 20. Corn-fields are the favorite sites for June nests and one at the edge of the village June 1, 1909, contained four eggs resting on a lining of small pebbles.

8. **Colinus virginianus.** BOB-WHITE.— Common resident. At times abundant. Just now slowly recovering from the devastation of the winter of 1902–1903. In the spring of 1903 whole coveys were found huddled together when the snows melted. They had burrowed in the snow drifts for shelter from the storms and were locked in their prison through a hard freeze following a sleet. Bob-white comes to the maples of the village to whistle each spring and fall. Earliest nesting, 20 eggs, May 16, 1899; latest, 16 eggs, July 18, 1909.

9. **Tympanuchus americanus.** PRAIRIE CHICKEN.— Common resident. Gaining a new lease of life as a direct result of our splendid game law, which has prohibited the killing of this grouse from 1902 to 1910. We hear the rolling boom of this splendid bird in every direction during the early spring months. February 11 is my earliest record of its notes while February 20 is the average date for 11 years.

Full sets number 12 to 17 eggs, and 13 eggs taken April 27, 1898, is my earliest set. May 29, 1901, a set of 13 eggs was taken in a small clover patch only 200 yards from our town park. This year I photographed a set of 13 eggs "in situ" not a third of a mile from the business district, and in June a Prairie Chicken flew the full length of one of our main streets only ten feet from the ground.

10. **Zenaidura macroura.** MOURNING DOVE.— Abundant summer resident, arriving March 4 to 15. Earliest nesting, 2 eggs, April 23, 1905; latest, 2 eggs, July 15, 1900. Nests in orchards and hedgerows, on stumps in timber, and often on the ground along the banks of open ditches.

11. **Cathartes aura septentrionalis.** TURKEY VULTURE.— Common summer resident. Arrives from the south April 2 to 18. Have found it nesting in logs, in hollow trees, twenty feet up in a dead stump, and six feet below the surface of the ground in the hollow of rotten stump. Earliest date for full set, two eggs, April 27, 1898, but a set of two eggs taken May 8, 1903, I consider nearest the real average date. Two eggs, taken June 25, 1905, is my latest date record. One female had to be lifted from her eggs.

12. **Accipiter cooperi.** COOPER'S HAWK.— Common summer resident. Common in timber but also nests in the maple groves on the farms. Earliest nesting, 4 eggs, April 21, 1903; latest, 4 eggs, June 1, 1900. Arrives in spring April 5 to 14. Not a winter resident here.

13. **Buteo borealis.** RED-TAILED HAWK.— Common resident. Entirely replaces *lineatus* in this locality. Nests in timber and groves alike and in isolated cottonwoods in fields. Earliest nesting, 2 eggs, March 21, 1900; latest, 2 eggs, May 12, 1908. Contrary to most published records, our Buteos do not deposit a second set in the old nest but always construct an entirely new nest. After losing the first set we may find the Red-tail covering the second set in a new nest 19 days later.

In my series of eight sets taken in seven years, one set is of three eggs and seven sets of two. All are heavily marked.

14. **Buteo swainsoni.** SWAINSON'S HAWK.— Rare summer resident, but seen each year. Dr. Jessee collected a set from this hawk in Lynn Grove

May 5, 1900. The nest was 65 feet up in an almost inaccessible position in an oak and contained three eggs. One captured and others seen have the pure white plumage with brown collar.

15. **Falco sparverius**, SPARROW HAWK.—Very common breeder, sometimes a resident. Nests in the timber and on the farms where it sometimes resorts to granaries and outbuildings. Is known here as a great enemy of the grasshoppers. May be seen perched upon telephone poles along our country roads. My earliest nesting record is 5 eggs taken May 2, 1905; latest, 5 eggs, May 27, 1900. First heard March 16 to 20.

16. **Aluco practicola**. BARN OWL.—Rare resident. My only record is a set of 5 eggs taken from an old ice-house in the village May 29, 1908. This year Mr. Guy Day found a nest of young in a hollow tree of Salt Fork timber. Date, May 20, 1909.

17. **Asio wilsonianus**. LONG-EARED OWL.—Rare resident. Have found this owl nesting only at Lynn Grove where I took the first set of 5 eggs from an old Crow nest April 23, 1901. April 18, 1905, I took a second set of 5 eggs in much the same situation.

18. **Strix varia**. BARRED OWL.—A not common nor rare resident but I was unable to find this owl nesting until April 26, 1908, when I took a set of 3 eggs from a hollow tree in Lynn Grove. This was undoubtedly a second set of the year, the first, probably an outside nest, destroyed by Crows which are abundant in this grove. On May 17, 1906, I captured a young of the year in the village.

19. **Otus asio**. SCREECH OWL.—Abundant resident. Nests in timber, old apple orchards on the farms and in the maple stubs of the village. For three seasons a pair has made their home in an old elm stub of my residence yard. Do not nest so early in my radius as they seem to from published records from other localities.

Typical sets consist of 5 eggs although I have taken two sets of 6. Earliest set of fresh eggs taken was a set of 5 on April 8, 1898. Latest date of fresh eggs was a set of 5 taken May 10, 1900. I find the brown phase only slightly in preponderance. Of 29 mated pairs noted during three seasons, 18 pairs were of opposite colorings, while seven pairs were of the brown phase and four pairs of the gray. A second set is very commonly deposited in the same nesting cavity, when the first is taken, with an average of thirty days intervening.

20. **Coccyzus americanus**. YELLOW-BILLED CUCKOO.—Common summer resident. Entirely replaces *erythrophthalmus* in this locality. This bird is a late breeder and inhabits woods, fields, and towns alike. Arrives May 7 to May 20. Earliest nesting, 3 eggs June 15, 1899. A remarkably late nest was located in a box elder of my residence yard in the village September 5, 1898. It was discovered when the leaves began to thin. The bird was setting on four incubated eggs but deserted them when the limbs became bare.

21. **Ceryle alcyon**. BELTED KINGFISHER.—Common summer resident, arriving March 24 to April 5. Found along all our smaller streams and

sometimes nesting up the dry runs. Earliest nesting, 5 eggs, May 6, 1897; latest, 7 eggs, May 31, 1908.

22. **Dryobates villosus.** HAIRY WOODPECKER.—Common resident of the woods but visits the village during the winter months. *Villosus* is our earliest nesting woodpecker and sits so closely on the eggs that rapping the tree will seldom flush the owner. After the young appear, however, the female is vigilant and it is difficult to surprise her on the nest. This habit makes the occupied nests difficult to locate until the brood is hatched. My earliest nesting record is 4 eggs, April 24, 1900. The female had to be lifted from her eggs. Latest record, 3 eggs, May 9, 1901.

23. **Dryobates pubescens medianus.** DOWNY WOODPECKER.—Common resident. Nests early in May and nesting cavities range from 3 to 60 feet from the ground. Most abundant in creek bottoms where the dead willows afford them easy excavating. Earliest nesting, 5 eggs, May 6, 1900; latest, 3 eggs, May 20, 1909.

24. **Centurus carolinus.** RED-BELLIED WOODPECKER.—Rather rare summer resident. Inhabits only the wilder timber bottoms. Although an extremely shy bird, I record from one to four pairs each season. My only set is of four eggs taken May 27, 1900. On May 20, 1908, I flushed one from her nest with one egg in a dead stump of Lynn Grove. Am not positive whether or not this woodpecker leaves during the winter months.

25. **Melanerpes erythrocephalus.** RED-HEADED WOODPECKER.—Common summer resident. Not nearly so numerous as in former years. The Redhead seems to be decreasing at about the same rate that the Flicker is increasing. Arrives April 5 to 10, but nests nearly a month later than the Flicker. Earliest nesting, 4 eggs, May 20, 1897; latest, 5 eggs, May 27, 1907.

26. **Colaptes auratus.** FLICKER.—An abundant and yearly increasing bird, a few remaining during the winter months. Begins nesting early in May and deposits seven to ten eggs. Earliest nesting, 8 eggs, May 2, 1898; latest, 9 eggs, May 17, 1901.

27. **Antrostomus vociferus.** WHIP-POOR-WILL.—Common summer resident. Arrives April 25 to May 1. Found only in the upland woods after their arrival from the south. Here they stay but a few days, leaving for the low damp woods for nesting. I have succeeded in finding but one set of eggs. This was a set of two taken May 16, 1901. A great deal has been written about this bird's night notes and the number of times they are repeated. At midnight on a moon-light night in May, 1905, I counted 175 repetitions of "whip-poor-will" before a pause was taken.

28. **Chætura pelagica.** CHIMNEY SWIFT.—Abundant summer resident. Arrives April 19 to 28. All leave at once for the south August 27 to September 5. The bulk now nest in chimneys although a number still stick to the primitive sites in the old hollow stumps in the forest. Earliest nesting, 5 eggs, June 5, 1902; latest, 4 eggs, June 22, 1907.

29. **Archilochus colubris.** RUBY-THROATED HUMMINGBIRD.—Common summer resident. Arrival is very regular, as following dates will show:

May 9, 1899; May 11, 1900; May 13, 1901; May 11, 1902; May 14, 1903; May 12, 1904; May 12, 1905; May 14, 1906; May 9, 1907; May 5, 1908; May 10, 1909. Is most abundant in swampy timber bottoms. Earliest nesting, two eggs, May 31, 1902; latest, two eggs, June 6, 1909. Probably ninety per cent of our hummers are nesting by June 4. Many stay in the fall until caught by the frosts. I have found them hanging quite dead in the vines after a sharp October night frost. Wisdom is shown in the spring by their late arrival, which fact convinces me that the late sojourners are young of the year.

30. **Tyrannus tyrannus.** KINGBIRD.—Common summer resident. Arrives April 24 to 30. In one year (1903) Kingbirds did not arrive until May 12. The Kingbird is present in every orchard but I have yet to see two pairs making their homes in the same orchard. Earliest nesting, 4 eggs, May 25, 1896; latest, 4 young, July 4, 1907. I have seen the Kingbird victor in every battle except one. In this dispute "Tyrannus" beat a hasty retreat from the onslaughts of an angry Yellow Warbler.

31. **Myiarchus crinitus.** CRESTED FLYCATCHER.—Common summer resident. An inhabitant of the woods and orchards near timber. The past four seasons a pair have made their home in the village. Arrives from the south April 26 to May 8. The typical nest contains a snake-skin. I have found but one nest without it. Earliest nesting, 4 eggs, May 25, 1899; latest, 4 eggs, June 18, 1901. Six eggs are most commonly deposited.

32. **Sayornis phoebe.** PHOEBE.—Common summer resident, arriving March 19 to April 10. Earliest nesting, 5 eggs, May 18, 1899; latest, 5 eggs, June 6, 1909. Each iron bridge over our streams shelters a pair of Phoebes each summer.

33. **Myiochanes virens.** WOOD PEWEE.—Common summer resident. Arrives April 2 to 22. Have found three nests of this woods loving flycatcher in the village. Of ten nests noted, each contained three eggs. Earliest nesting, 3 eggs, June 3, 1905; latest, 3 eggs, July 21, 1898.

34. **Empidonax virescens.** ACADIAN FLYCATCHER.—Summer resident. Inhabitant of the low damp woods only. Common only at Salt Fork timber. Have never seen this bird at Lynn Grove. Earliest nesting, 3 eggs, May 30, 1902; latest, 3 eggs, June 13, 1909. Nests of this species may always be recognized by the grasses hanging one to two feet below the nest.

35. **Empidonax trailli trailli.** TRAILL'S FLYCATCHER.—Common summer resident. Abundant in our hedge-rows and country orchards. Entirely replaces *alnorum* in this locality. Contrary to its habits elsewhere, *trailli* is never seen in the woodlands here but is strictly a prairie bird. During eleven seasons of observing this bird, and examining two to twenty nests a season, I have never found a nest in a large or even medium sized tree. The smaller growths, averaging about fifteen feet high, are always chosen. Arrives May 12 to 20. Earliest nesting, 3 eggs, June 12, 1899; latest, 4 eggs, July 7, 1896.

36. **Otocoris alpestris praticola.** PRAIRIE HORNED LARK.—Abundant

resident. Nests earliest of our ground birds. Is often incubating surrounded by the snows of a late winter storm. After a good snow fall in March, the only dark spots showing on the white meadows are apt to be nests with setting Praticolas. First nests are placed in closely cropped pastures, sunken even with the surface and, woven solidly, are able to withstand the fierce March winds. The June nests are placed at the hills of corn and so loosely constructed that one as a whole could not be lifted from the ground. Earliest nesting, 3 eggs, March 15, 1898; latest, 4 eggs, July 6, 1896. Have found nests with fresh eggs on the widely separated dates, March 15, March 31, April 10, April 30, May 26, June 6, June 18, and July 6.

37. **Cyanocitta cristata.** BLUE JAY.— Abundant resident of the woods, village, and country orchards. Earliest nesting, 5 eggs, May 6, 1900; latest, 5 eggs, June 29, 1907.

38. **Corvus brachyrhynchos.** CROW.— Abundant resident. So numerous that 197 were killed in one day last December by two men. Nests in timber, farm orchards, hedges and in evergreens of the village cemetery. Earliest nesting, 5 eggs, April 2, 1899; latest, 6 eggs, May 11, 1899. Our Crows are developing into chicken and egg robbers far more exasperating than the Hawks.

39. **Molothrus ater.**—COWBIRD.— Abundant summer resident. I even find them imposing on the Yellow-throats in the swampy places. Have repeatedly found as many eggs belonging to the rightful owner lying on the ground under the nest as I have found Cowbird eggs in the nest. This has convinced me that every Cowbird egg deposited is at the expense of one songbird's egg. In several instances I have found the nesting bird incubating nothing but Cowbird's eggs. One Scarlet Tanager was covering four eggs of the Cowbird, while an Ovenbird was extremely anxious when I discovered her nest which contained seven eggs of the Cowbird and none of her own. Earliest eggs found May 10; latest, July 18.

40. **Agelaius phoeniceus.** RED-WINGED BLACKBIRD.— Common summer resident. Arrives March 17 to April 1. In 1904 the arrival date was February 29, which I regard as abnormal. Earliest nesting, 4 eggs, May 16, 1905; latest, July 17, 1898, 4 eggs. I once found a nest in a wild cherry tree within ten feet of a farm residence. It was one half mile from open water. (Description in Davies's 'Nests and Eggs.') Later nests are common in dry timothy fields in late July.

41. **Sturnella magna.** MEADOWLARK.— Abundant summer resident. Arrives March 2 to 11. Earliest nesting, 5 eggs, May 9, 1899; latest, 4 eggs, July 17, 1898.

42. **Icterus spurius.** ORCHARD ORIOLE.— Common summer resident. Arrive May 2 to 12. Earliest nesting, 4 eggs, May 18, 1896; latest, 4 young, July 4, 1900.

43. **Icterus galbula.** BALTIMORE ORIOLE.— Common summer resident. Arrives regularly April 22 to 29. Earliest nesting, 5 eggs, May 31, 1898; latest, 5 eggs, June 20, 1904.

44. **Quiscalus quiscula æneus.** BRONZED GRACKLE.— Abundant summer resident. Arrives Feb. 28 to March 7. Earliest nesting, 4 eggs, April 26, 1897; latest, 5 eggs, May 25, 1905.

45. **Astragalinus tristis.** GOLDFINCH.— Common resident. In full summer plumage by May 1. Earliest nesting, 6 eggs, July 14, 1896. Latest, 5 young, Sept. 10, 1902.

46. **Poœcetes gramineus.** VESPER SPARROW.— Common summer resident. Arrives March 19 to April 1. Earliest nesting, 4 eggs, May 13, 1898; latest, 4 eggs, June 15, 1898.

47. **Coturniculus savannarum australis.** GRASSHOPPER SPARROW.— Abundant summer resident. Arrives April 23 to May 4. Earliest nesting, 5 eggs, May 27, 1898; latest, 5 eggs, June 6, 1901. Second nests are abundant in July in second growth clover.

48. **Chondestes grammacus.** LARK SPARROW.— Rare summer resident. Although I have observed this bird for three seasons, I have but one nesting record. On May 17, 1908, I found a nest of four fresh eggs in an oat field near Salt Fork Creek. Have also observed two pairs near Bowse's grove during 1909. I have found no other record of the nesting of *grammacus* in eastern Illinois.

49. **Spizella passerina.** CHIPPING SPARROW.— Rare summer resident. Formerly abundant. Arrives March 10 to 22. Earliest nesting, 4 eggs, May 8, 1898; latest, 4 eggs, May 20, 1896. The Chipping Sparrow is very likely to become extinct here unless it builds a more substantial nest, as each summer storm dislodges them from their foundations.

50. **Spizella pusilla.** FIELD SPARROW.— Abundant summer resident. Arrives March 19 to 31. Earliest nesting, 3 eggs, May 11, 1902; latest, 3 eggs, July 17, 1898.

51. **Melospiza melodia.** SONG SPARROW.— Abundant summer resident. Arrives Feb. 19 to March 10. Earliest record Feb. 10, 1907. Earliest nesting, 4 eggs, May 5, 1897; latest, 3 eggs, July 18, 1897.

52. **Peucœa æstivalis bachmani.** BACHMAN'S SPARROW.— Rare summer resident. The only breeding record I have of this sparrow is a nest and four eggs which I took May 31, 1896. This set was identified by both Dr. Ralph and Major Bendire and was in Bendire's hands at the time of his death. I have seen no more northern record of the nesting of *bachmani*.

53. **Melospiza georgiana.** SWAMP SPARROW.— Rare summer resident. Arrives April 2 to 10. Earliest nesting, 3 eggs, May 17, 1906; latest, 5 eggs, May 26, 1905. Of four nests found, each had an appendage or handle constructed of grass stems protruding from one side about three inches.

54. **Passer domesticus.** EUROPEAN HOUSE SPARROW.— Abundant resident. Nests from March to September. Numbers constantly increasing.

55. **Pipilo erythrophthalmus.** TOWHEE.— Common summer resident. Arrives March 14 to April 4. Earliest nesting, 3 eggs, May 16, 1901; latest, 3 eggs, June 10, 1901. One remarkable nest was found seven feet

from the ground in a vine-covered sapling. Hogs were running wild in this piece of woods, which was the probable cause of this departure from regular habits.

56. **Cardinalis cardinalis.** CARDINAL.—Common resident. Often nests in the village. Earliest nesting, 3 eggs, May 22 1906; latest, 3 eggs, June 16, 1898.

57. **Passerina cyanea.** INDIGO BUNTING.—Common summer resident. Arrives April 22 to May 9. A cosmopolitan bird, nesting in the woods, along country highways, open ditches, rail-road right of ways and berry patches in village. Earliest nesting, 4 eggs, May 25, 1896; latest, 3 eggs, Aug. 6, 1897.

58. **Zamelodia ludoviciana.** ROSE-BREASTED GROSBEEK.—Common summer resident. Arrives April 23 to May 2. Earliest nesting, 4 eggs, May 18, 1902; latest, 4 eggs, May 26, 1905. The Rose-breast now nests regularly in the village and is famous as a potato-bug destroyer.

59. **Spiza americana.** DICKCISSEL.—Abundant summer resident. Arrives May 2 to 12. Nests on the ground in clover, from four to ten feet up in hedge-rows, in thistles and tall weeds. Earliest nesting, May 31, 1896, 5 eggs; latest, 4 eggs, Aug. 1, 1898. Probably our most rapidly increasing song bird.

60. **Piranga erythromelas.** SCARLET TANAGER.—Common summer resident. Arrives May 2 to 17. Earliest nesting, 3 eggs, May 22, 1896; latest, 4 eggs, June 4, 1907.

61. **Piranga rubra.** SUMMER TANAGER.—Rare summer resident. The only breeding record I have of this bird in this locality is a nest and three eggs taken June 2, 1909, in the village. This is the second pair I have seen here. I can find no more northern breeding record in Illinois.

62. **Progne subis.** PURPLE MARTIN.—Common summer resident. Arrives March 30 to April 6. Earliest nesting, 4 eggs, May 17, 1909; latest, 5 eggs, June 10, 1898.

63. **Petrochelidon lunifrons.** CLIFF SWALLOW.—Rare summer resident. Formerly a very abundant bird. Arrives April 22 to May 1. The only set I have collected in recent years was of four eggs taken June 19, 1908. In August, 1909, I saved two perfect nests from which young had flown. Back in the 80's I have seen boys with hats full of these eggs.

64. **Hirundo erythrogaster.** BARN SWALLOW.—Common summer resident though not so numerous as formerly. Arrives April 19 to 30. Earliest nesting, 5 eggs, June 13, 1899; latest, 4 eggs, July 2, 1906.

65. **Iridoprocne bicolor.** TREE SWALLOW.—Rare summer resident. The great bulk pass north. Earliest nesting, May 17, 1906, when I saw a pair building in a lofty oak snag; latest, 6 eggs, May 23, 1905. Arrives April 20 to 30. Migrates south in early September in great armies.

66. **Riparia riparia.** BANK SWALLOW.—Common summer resident. Arrives April 10 to 15. Earliest nesting, 5 eggs, May 18, 1905; latest, 6 eggs, June 7, 1908. This swallow prefers black dirt to sand banks in this locality.

67. **Stelgidopteryx serripennis.** ROUGH-WINGED SWALLOW.—Common summer resident. More abundant than commonly supposed. Have found it nesting along all our small streams. In each case I have caught one of the birds on the nest, which does not extend in to so great a depth as the nests of the Bank Swallows. The average length of the tunnel is only nine inches while the Bank Swallow burrows often to a depth of three feet. They do not nest in colonies like the Bank Swallows but are scattered in single or two or three pairs. Earliest nesting, 7 eggs, May 17, 1906; latest, 6 eggs, June 3, 1905.

68. **Lanius ludovicianus.** LOGGERHEAD SHRIKE.—Abundant summer resident. Arrives March 5 to 15. Our form is the true Loggerhead, *migrans* not having been recorded here. Earliest nesting, 6 eggs, April 12, 1898; latest, 6 eggs, June 3, 1907. The typical set is six although about one set in ten contains seven eggs. The uprooting of our hedge-rows is causing a noticeable reduction in the number of our nesting shrikes.

69. **Vireosylva olivacea.** RED-EYED VIREO.—Common summer resident. Arrives May 5 to May 9. Earliest nesting, 4 young, May 15, 1898; latest, 4 eggs, June 4, 1907. Unoccupied nests of this bird are common. I believe, through many years' observations, that they have the same habit as the Marsh Wrens — that of building extra nests.

70. **Vireosylva gilva.** WARBLING VIREO.—Common summer resident. Arrives May 2 to 10. Never seen in woodlands in this vicinity, occurring only in the village where it chooses the maple tree for its nests, and in the apple orchards on the farms. Common in the woods along Illinois River bottoms but habit reversed here. Earliest nesting, 4 eggs, June 1, 1905; latest, 4 eggs, June 19, 1898.

71. **Vireo griseus.** WHITE-EYED VIREO.—Not rare summer resident. I have found this vireo only in the Salt Fork timber where it arrives April 25 to May 4. My only nesting record is a nest and four eggs taken June 10, 1900.

72. **Vireo belli.** BELL'S VIREO.—Rare summer resident. Inhabits only the fruit farms where fruit trees and berry thickets abound. My only nesting record is a nest and four eggs taken July 4, 1899.

73. **Prothonotaria citrea.** PROTHONOTARY WARBLER.—Summer resident. Not rare but very local along our streams. Arrives May 10 to 19. Earliest nesting, 5 eggs, May 24, 1905; latest, 4 eggs, June 26, 1900.

74. **Dendroica aestiva.** YELLOW WARBLER.—Common summer resident. Arrives April 29 to May 12. Never seen in woods here. Inhabitant of orchards, hedge-rows along the highways, and occasionally nests in the village. In Putnam County, along the Illinois River, I found this warbler the most abundant breeder of the woodlands. This is another habit reversal which I cannot account for. Earliest nesting, 4 eggs, May 26, 1905; latest, 4 eggs, May 30, 1896.

75. **Seiurus aurocapillus.** OVENBIRD.—Common summer resident of the low damp woods only. Arrives April 30 to May 5. Earliest nesting, 5 eggs, May 16, 1901; latest, 4 eggs, May 22, 1903.

76. **Seiurus motacilla.** LOUISIANA WATER-THRUSH.—Rare summer resident. Arrives May 2 to 12. Have but two nesting records. Earliest, nest and 5 eggs, collected by Guy Day in Salt Fork bottoms May 30, 1906; latest, taken by me at same place, 5 eggs, June 9, 1907.

77. **Oporornis formosa.** KENTUCKY WARBLER.—Common summer resident. Inhabitant of our low damp woods only. Arrives May 2 to 10. Earliest nesting, 5 eggs, May 23, 1902; latest 5 eggs, June 6, 1909.

78. **Geothlypis trichas.** YELLOW-THROAT.—Abundant summer resident. Arrives April 30 to May 9. Nests in briar patches, along country roads, by open ditches, in woods, and extensively in swampy places. Nests difficult to find except in the swampy spots where they may be easily located in the bunches of dead swamp grass about six inches from the ground. In a small half-acre of swamp, I found in one hour seventeen nests of the Yellow-throat. Earliest nesting, 4 eggs, May 17, 1896; latest, 5 eggs, June 11, 1906.

79. **Icteria virens.** YELLOW-BREASTED CHAT.—Common summer resident. Inhabitant of briar thickets at edge of woods. Arrives May 9 to May 13. Earliest nesting, 4 eggs, May 30, 1902; latest, 4 eggs, June 17, 1900.

80. **Wilsonia mitrata.** HOODED WARBLER.—Rare summer resident. Arrives May 2 to 10. Although pairs of this bird are noted each season, my only nesting record is five eggs, taken May 30, 1897. This nest was placed in a small bush six inches from the ground.

81. **Setophaga ruticilla.** REDSTART.—Common summer resident. Found nesting, however, only in Salt Fork timber. Arrives April 27 to May 5. Earliest nesting, 4 eggs, May 24, 1901; latest, 4 eggs, June 4, 1908.

82. **Mimus polyglottos.** MOCKINGBIRD.—Common summer resident. Becoming more abundant each year. Arrives April 16 to 28. Earliest nesting, 5 eggs, May 18, 1902; latest, 4 eggs, July 4, 1897.

83. **Dumetella carolinensis.** CATBIRD.—Common summer resident. Arrives April 26 to May 2. Earliest nesting, 5 eggs, May 14, 1896; latest, 4 eggs, July 1, 1897.

84. **Toxostoma rufum.** BROWN THRASHER.—Abundant summer resident. Arrives March 23 to April 1. Earliest nesting, 4 eggs, May 2, 1898; latest, 5 eggs, June 7, 1899.

85. **Thryothorus ludovicianus.** CAROLINA WREN.—Common resident. Nests in all three timbers. Earliest nesting, 5 eggs, May 31, 1905; latest, 4 eggs, June 8, 1909. These records are most certainly second nests of the season, as I have seen young out of the nest in late April. Nests undoubtedly early in April.

86. **Thryomanes bewicki.** BEWICK'S WREN.—Rare summer resident. Arrives March 27 to April 5. Earliest nesting, 5 young, photographed in a paint keg, May 20, 1906; latest, 4 eggs, June 16, 1906.

87. **Troglodytes aëdon.** HOUSE WREN.—Abundant summer resident. Arrives April 10 to 20. Earliest nesting, 6 eggs, May 18, 1896; latest, 7 eggs, July 12, 1907.

88. **Sitta carolinensis.** WHITE-BREASTED NUTHATCH.—Common resident. Seen at all times during the year, yet I have found but one nest. This was taken at Lynn Grove April 28, 1901, and contained eight eggs. Troops of six to eight young are commonly seen by latter part of May.

89. **Baeolophus bicolor.** TUFTED TITMOUSE.—Common resident. Earliest nesting, 7 eggs, May 9, 1901; latest, 6 eggs, May 27, 1900. Comes to the village during winter months.

90. **Penthestes atricapillus.** CHICKADEE.—Common resident. Earliest nesting, 6 eggs, May 10, 1908; latest, 6 eggs, June 1, 1905.

91. **Poliophtila caerulea.** BLUE-GRAY GNATCATCHER.—Common summer resident. Arrives April 19 to 30. Earliest nesting, 3 eggs, May 19, 1905; latest, 5 eggs, May 22, 1906.

92. **Hylocichla mustelina.** WOOD THRUSH.—Common summer resident. Arrives April 24 to May 2. Earliest nesting, 3 eggs, May 18, 1902; latest, 4 eggs, June 6, 1909.

93. **Merula migratoria.** ROBIN.—Abundant summer resident. Sometimes seen through the winter months. Arrives Feb. 27 to March 4. Earliest nesting, 4 eggs, April 19, 1897; latest, 4 eggs, July 18, 1908.

94. **Sialia sialis.** BLUEBIRD.—Common summer resident. Arrives Feb. 28 to March 3. Earliest nesting, 6 eggs, April 23, 1905; latest, 4 eggs, May 26, 1908.

Additional Summer Residents.

I have evidence of the breeding of the following ten species but have not as yet secured a set of eggs.

95. **Aix sponsa.** WOOD DUCK.—Rare summer resident. On May 6, 1909, I found a female swimming in Salt Fork Creek that would not leave the vicinity. On May 18, 1904, I flushed three females and a male from the Embarras in Bowse's grove. I am confident from the dates that this bird occasionally nests with us.

96. **Porzana carolina.** SORA.—Not rare summer resident. Arrives April 20 to May 1. On June 30, 1909, young Soras were numerous in the Embarras swamp four miles south of the village. Nests here each year but I have been unable to locate the nest.

97. **Porzana jamaicensis.** BLACK RAIL.—Rare summer resident. In company with Dr. Jessee I found a nest of this rail in the Embarras swamp, May 30, 1901. The nest was at the edge of the swamp and had a roof, formed by grass stems broken over each other. Two eggs were in the nest; they were cream white with small reddish dots covering them sparsely. We both examined thoroughly the nest and eggs and left it for a complete set. Unfortunately a cow stepped into this rare home and deprived us of a full record.

98. **Philohela minor.** WOODCOCK.—Rather rare summer resident. On May 28, 1899, in Salt Fork timber, I flushed an old Woodcock and four young just able to fly. The young I could have easily caught. Since then

I have seen them each season but have never succeeded in locating a nest. This year (1909) I flushed a Woodcock on May 18. Last year a setting female was caught by a cat in our town park May 23 and sent to me by the owner of the cat.

99. **Circus hudsonius.** MARSH HAWK.—Rare resident. Seen here each year but the only nesting record I have is one shot off its nest on the ground near Lynn Grove, by Mr. Rush, a farmer, and eggs broken.

100. **Buteo platypterus.** BROAD-WINGED HAWK.—Not a rare summer resident. Seen each season at Lynn Grove and Salt Fork; kept one six months as a pet. Dr. Jessee had four young taken from a nest here. On May 5, 1909, I went to Salt Fork timber to collect a set from a nest which I located. I found one of the Broad-wings at the foot of the tree dead and the nest shot to pieces.

101. **Bubo virginianus.** GREAT HORNED OWL.—Rare resident. Have mounted four in eight years that were captured here. On May 16, 1906, I captured two young just able to fly in Salt Fork timber and a farmer showed me the tree in which they were hatched

102. **Chordeiles virginianus.** NIGHTHAWK.—Common summer resident. Arrives April 29 to May 10. Fall flights begin August 30 to September 5. This bird nests with us each summer but I have not secured a set. A farmer plowed over a nest of two eggs in early June of last year but could not save them.

103. **Dolichonyx oryzivorus.** BOBOLINK.—Abundant migrant but rare summer resident. I have noted its presence during breeding months for five seasons. During May and June, 1909, two pairs made their homes in Maple Grove meadows three miles west. On May 27, 1909, I flushed a female from the timothy in Penmanfield at edge of village.

104. **Bombycilla cedrorum.** CEDAR WAXWING.—Rare summer resident. Common both north and south of this locality but very rare in this immediate vicinity. I saw a flock of 20 in Bowse's Grove June 26, 1906. Two young were shot in August, 1908, at Lynn Grove, which would seem to prove that they nested that year at least in the grove of pines at edge of timber.